The Health of New Hampshire's Community Hospital System

A Financial Analysis

Androscoggin Valley Hospital




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An Important Message to Readers of the Hospital Financial Analysis from the New Hampshire Department of Health and Human Services

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Introduction

The following Hospital Financial Analysis is a byproduct of the December 13 report, *The Health of New Hampshire's Community Hospital System*, issued by the New Hampshire Department of Health and Human Services. The individual financial narratives are part of a series of analyses addressing the financial condition of the state's health care system.

In the following report, you will find an analysis of the hospital's financial well being from 1993-1998, and **then an additional analysis** that covers the most recent period for which information is currently available, 1999. As audited financial statements for 2000 become available from the hospitals, this information will be updated.

Each hospital financial analysis is broken into five sections. These include:

- Background information on the hospital size, location, payor mix and affiliates;
- A Summary of the Financial Analysis;
- A Cash Flow Analysis;
- An Analysis of Profitability, Liquidity and Capital; and
- An Estimation of Charity Care and Community Benefits

Financial Benchmarks

Financial benchmarks include traditional measures of profitability, liquidity, solvency, and cash flow. Each of these areas of analysis is defined below. Additional information about the ratios or the nature of financial analysis can be obtained by consulting health care financial texts (Gibson 1992; Cleverley 1992).

Profitability:	Purpose	Calculation
Total Margin	Measures the organization's ability to cover expenses with revenues from all sources	Ratio of (Operating Income and Nonoperating Revenues)/Total Revenues
Operating Margin	Measures the organization's ability to cover operating expenses with operating revenues	Ratio of Operating Income/Total Operating Revenue
PPS Payment/Cost	Measures the relationship between Medicare PPS payments and Medicare PPS costs; numbers above 1 indicate that payments exceed costs	Ratio of Medicare Prospective Payment System (PPS) Payments /PPS Costs, derived from Medicare Cost Reports
Non-PPS Payment/Cost	Measures the relationship between payment and costs of all payment sources other than Medicare PPS[1]	Ratio of (Total Operating Revenue minus PPS Payments) / (Total Operating Cost minus PPS Costs)
Markup Ratio	Measures the relationship between hospital-set charges and hospital operating costs; generally only self-pay and indemnity payers pay hospital charges	Ratio of (Gross Patient Service Charges Plus Other Operating Revenue) / Total Operating Expense
Deductible Ratio	Measures the relationship between hospital's contractual discounts negotiated with (private payers) or taken by payers (Medicare and Medicaid) and hospital charges	Ratio of Contractual Adjustments/Gross Patient Service Revenue
Nonoperating Revenue Contribution	Measures the contribution of nonoperating revenues (activities that are peripheral to a hospital's central mission) to total surplus or deficit	Ratio of Nonoperating Revenues (includes unrestricted donations, investment income, realized gains (losses) on investments and peripheral activities)/Excess Revenue over Expense
Realized Gains to Net Income	Measures the contribution of realized gains (a subset of nonoperating revenues) to total surplus or deficit	Ratio of realized gains (losses)/Excess Revenue over Expense

[1] Medicare's Prospective Payment System includes only inpatient-related operating and capital costs and excludes Medicare payments for outpatient costs, which have not been part of PPS through 1998

Liquidity:		
Current Ratio	Measures the extent to which current assets are available to meet current liabilities	Current Assets/Current Liabilities
Days in Accounts Receivables	Measures how quickly revenues are collected from patients/payers	Patient Accounts Receivable/(Net Patient Service Revenue / 365)
Average Pay Period	Measures how quickly employees and outside vendors are paid by the hospital	(Accounts Payable and Accrued Expenses)/ (Average Daily Cash Operating Expenses)[2]
Days Cash on Hand	Measures how many days the hospital could continue to operate if no additional cash were collected	(Cash plus short-term investments plus noncurrent investments classified as Board Designated)/(Average Daily Cash Operating Expenses)
Solvency:		
Equity Financing Ratio	Measures the percentage of the hospital's capital structure that is equity (as opposed to debt, which must be repaid)	Unrestricted Net Assets/Total Assets
Cash Flow to Total Debt	Measures the ability of the hospital to pay off all debt with cash generated by operating and nonoperating activities	(Total Surplus (Deficit) plus Depreciation and Amortization Expense)/Total Liabilities
Average Age of Plant	Measures the relative age of fixed assets	Accumulated Depreciation/ Depreciation Expense

Hospitals As Integrated Systems of Care

Many of New Hampshire's hospitals have developed into systems of care with complex corporate organizational structures. Hospitals may be owned by a holding company or may themselves own other subsidiaries. (The hospital corporate organization charts will be made available with these financial narratives at a future date.) These individual analyses that follow attempt to isolate the hospital entity to the extent possible as the basis of analysis. This distinction is important because subsidiaries that operate within a larger hospital system may operate at higher or lower levels of financial performance than the hospital. For example, a home health agency impacted by Medicare reimbursement changes that result in an operating deficit might be directly supported by the hospital. On the other hand, an ambulatory surgical unit (or another entity within the holding company of which the hospital is a part of) with a healthy financial performance could have a positive impact on the hospital with an operating deficit.

[2] (Operating Expenses Less Depreciation Expense Less Bad Debt Expense)/365

Charity Care and Community Benefits

Each hospital financial analysis includes a section on Charity Care and Community Benefits. This section of the hospital financial narrative is more exploratory than are the other standardized financial benchmarks. For further background information or for specific information on how these measures were calculated, please see the *Analysis of Health Care Charitable Trusts in the State of New Hampshire*.

In 1999, the legislature passed the New Hampshire Community Benefits law (SB 69), which requires that all non-profit hospitals and other health care charitable trusts with $100,000 or more in their total fund balance complete a needs assessment of the communities that they serve. The legislation also calls for the hospitals and others to consult with members of the public within their communities to discuss what the provider has done in the past to meet community needs, what it plans to do in the future, and then submit the plan to the Attorney General's office.

New Hampshire's law is a reporting statute. It does not contain a dollar value or minimum threshold the non-profit trusts must meet. With this new statute, the hospitals and others are working to improve the measurement of charity care (free care) and other community benefits they provide in return for exemption from local, state and federal taxes. Since this law is relatively new, the audited financial statements used for the purpose of this community benefit analysis may not yet fully reflect the dollar value of community benefits beyond charges foregone for charity care or necessary but unprofitable services. New Hampshire's definition of community benefits is very broad; it includes free care but does not include bad debt or shortfalls in reimbursement from the Medicare and Medicaid programs.

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For More Information

Questions or comment concerning this report may be directed to the Office of Planning and Research at 603-271-5254.

ANDROSCOGGIN VALLEY HOSPITAL, BERLIN, NEW HAMPSHIRE 1993 – 1999 FINANCIAL ANALYSIS

Androscoggin Valley Hospital is a small hospital providing inpatient, outpatient, emergency care and home health services to residents of Coos County. Facilities include 64 acute-care beds[3]. As of 1997, Medicare followed by private insurers represented the largest percentage of payers for inpatient discharges (56% and 23%, respectively)[4]. Medicaid patients constituted 16% of patients in 1997.

NorthCare, Inc., is the not-for profit (NP) parent holding company of the hospital. Affiliated organizations include Androscoggin Valley Hospital Foundation (NP), Mountain Health Services (NP), a primary care provider organization, and NorthCare Health Services, Inc., a for-profit company.

SUMMARY OF FINANCIAL ANALYSIS 1993-98

Androscoggin Valley Hospital's financial performance is strong. Total profit margins were above 10% in 4 of the 7 years analyzed, driven mainly by nonoperating revenues. Realized gains on the sale of investments were major contributors to the bottom line since 1994. Operating income is positive and relatively stable. Increased profitability improved the hospital's solvency, which remains strong after 1997 even after an increase in long-term borrowing. Overall liquidity is strong despite a jump in days in receivables in 1998.

Cash Flow Analysis 1993-98

Over the six-year period, cash from net income constituted half of total cash sources; another one-third came from depreciation. Forty-six percent of the cash generated was invested in physical plant, an amount that was 53% greater than depreciation expense over the period. Despite this investment in plant, however, the age of plant increased steadily over the period to reach 12 years in 1998. The hospital used 33% of its cash to increase investments in marketable securities, both board-designated and trustee-held, and to increase its cash reserves. This level of investment provided an usually large amount of liquidity for a small hospital – 392 days unrestricted cash on hand by 1998 – and allows it to generate a significant amount of investment income to enhance its bottom line. The hospital put another 15% of its cash into affiliates: $3.4M was loaned to affiliates and equity transfers represented a net cash outflow ($1.5M) to Mountain Health Services to provide working capital.

The hospital issued new debt in 1997 ($10M), which represented 31% of the hospital's total cash sources. Debt issued exceeded the amount of debt repaid by over $5M, leaving the hospital with additional resources to invest in plant and/or marketable securities or affiliates.

Ratio Analysis 1993-98[5]

Profitability

As stated above, the hospital's profitability is strong. Total margins grew, while operating income remained relatively stable. A slight dip in profit margins during the 1998 fiscal year was due to a small drop in operating revenue, due to increased deductions from revenue and a drop in the hospital's markup of charges over cost. Nonoperating revenues consistently contributed over half of the total income. Realized gains on the sale of investments represented 58% of the bottom line by 1998.

[3] 1998 American Hospital Association Guide.
[4] 1997 data from the State of New Hampshire Department of Health and Human Services.
[5] NH state medians from The 1998-99 Almanac of Hospital Financial & Operating Indicators.

In 1995, the drop in operating margin from 4 to 1% was related to the drop in markup from 52 to 41%, coupled with expenses growing faster than revenues, including an increase in management fees paid to the parent company (from $800K to $1.2M). The markup recovered in 1996 and so did the operating margin, until 1998, when the operating margin dropped from 4 to 2% due to a net reduction in revenue of 2%.

Liquidity

The hospital's overall liquidity is strong. The current ratio, which measures the hospital's ability to meet current obligations with current assets (short-term investments and cash), was below the state median until 1997. Since then, this ratio has improved and indicates that the hospital is able to cover two times its current liabilities with current assets. With the inclusion of board-designated (long-term) investments, this measure is very strong and indicates that the hospital is consistently able to meet current liabilities more than five times.

Though the days cash on hand ratio with short-term sources is below the state median until 1997, the hospital is extremely liquid. With the inclusion of board-designated investments in this measure, the hospital surpasses the state median and by 1998 has 392 days of unrestricted cash on hand. (Note: the jump in liquidity measures including board-designated investments between 1995 and 1996 is partly due to an accounting principle change requiring investments to be stated at market value rather than historical cost).

Working capital appears to be managed well as illustrated by days in accounts receivable below 60 and average pay period measures below 45 between 1993 and 1997. However, both of these measures increased in 1998, with days in accounts receivable jumping to 71.7, an increase of almost twenty days over 1997.

Capital Structure

The hospital has very little debt, as illustrated by the high equity financing ratio. Even after the hospital increased its long-term borrowing in 1997, it is less leveraged than other hospitals in the state, with 68% of its assets financed by equity. The low long-term debt to equity ratio supports this. The favorable trends in both of these measures from 1993 to 1996 was due to growth in the unrestricted fund balance (equity), as no new debt was issued during this time and profit margins increased, improving the hospital's solvency.

Debt coverage ratios show that the hospital is able to carry its debt easily. Yearly cash flows from net income cover approximately 30% of the hospital's total debt. Additionally, strong and increasing debt service coverage ratios show that the hospital produces enough net income to cover debt principal and interest payments with a significant margin of safety.

CHARITY CARE AND COMMUNITY BENEFITS

Charity care reported as charges forgone represented 0.7 to 3% of gross patient service revenues over the six-year period. The hospital did not provide charity commensurate with the value of its tax exemption. With the inclusion of 100% bad debt, the amount of charity care provided met the hospital's tax benefit value from 1993 to 1995. After 1996, the amount of charity care with 100% bad debt did not meet the estimated tax benefit.

The hospital did not disclose additional information about community benefits in the footnotes to its financial statements.

Androscoggin Valley Hospital has a relatively high proportion of Medicare patients, and offers HIV/AIDS services and trauma center facilities[1], which may be considered additional charitable benefit to the community.

Cash Flow Analysis 1993 - 1999

Between 1993 and 1999, cash from net income constituted 50% of total cash sources. 32% of total cash was generated from depreciation. Therefore, 82% of cash was generated internally. 44% of the cash generated was invested in physical plant, an amount that was 40% greater than depreciation expense over the period. Despite this investment in plant, however, the age of plant increased steadily to reach 13 years in 1999. The hospital used 34% of its cash to increase investments in marketable securities, both board-designated and trustee-held, and to increase its cash reserves. This level of investment provided an unusually large amount of liquidity for a small hospital – 358 days unrestricted cash on hand by 1999 – and allowed it to generate a significant amount of investment income to enhance its bottom line. The hospital put another 14% ($4.05M) of its cash into affiliates in the form of loans.

1999 Ratio Analysis

Profitability

The hospital's profitability was strong. In 1999, total margins were 6%, and operating margins were 1%, both slightly below 1998 levels. The income reduction was due to a 6% increase in operating expenses and a 4% increase in net patient service revenue. Non-operating revenues consistently contributed to more than half of the total income.

Liquidity

The hospital's overall liquidity was strong. The current ratio was 2.31 times. This was slightly below the 75 percentile of the industry average in 1999. Once board-designed (long-term) investments were included, this measure was very strong, at 7.97 times. The hospital had more than five times the resources needed to meet its current liabilities.

The days current cash on hand ratio was only 10.72 days. However, once board-designed investments were included, the hospital surpassed the state 75 percentile in 1999 with 358 days of unrestricted cash on hand.

The accounts receivable was fairly high at 80 days in 1999. The average pay period was 61 days, a relatively slow payment cycle. Bad debt provision increased by $300K in 1999.

Capital Structure

The hospital had very little debt. The hospital had a high equity-financing ratio of 69% that was between 50^{th} and 75^{th} percentile of the state. Debt service coverage ratios indicate that the hospital was able to carry its debt easily. In 1999, the debt service coverage ratio with restricted funds was 4.5 times and debt service coverage ratio with operating income only was at 2.76 times. Yearly cash flows from net income covered approximately 20% of the hospital's total debt in 1999. This demonstrated that the hospital produced sufficient net income to cover its debt principal and interest payments and still maintain a significant margin of safety.

Charity Care and Community Benefits

Charitable care charges forgone increased from 0.71% to 1.03% as a percentage of gross patient service revenue. Bad debt increased from 2.33% to 3.16%.

Summary

Androscoggin Valley Hospital's financial performance was strong. Although its operating margin was only 1% in 1999, its total margin was 6%. This was between 50th and 75th of the state hospital industry in 1999. The hospital had adequate cash flow to meet its debt service and had strong equity to cover its short-term liability.

Source: Audited Financial Statements. Prepared by Nancy M. Kane, D.B.A. Harvard School of Public Health